# Seminar EMSA-SAFEMED III
## At-sea Exercise

Mr Victor Diaz Seco / Head of Section
Ms Teresa Cunha / Project Officer
Pollution Response Services Unit

**Bilbao / 21 April 2015**

EMSA
European Maritime Safety Agency

## Agenda for 22 April

| | |
|---|---|
| **09:00 – 09:30** | Meeting at the lobby of the Hotel Abando (Bilbao) and proceed to Plaza Pio Baroja |
| **09:30 – 10:45** | ■ Boarding observer´s boat. Sailing to port of Bilbao.<br>■ Visit to the vessel Monte Arucas and OSR equipment (alongside in Bilbao port) |
| **10:45 – 11:15** | Break |
| **11:15 – 14:00** | ■ Boarding observer´s boat<br>■ Briefing<br>■ At sea deployment of boom and skimmer in J-formation |
| **14:00 – 15:00** | Lunch on board observer's boat |
| **15:00 – 16:00** | Return to embarking point at Bilbao city centre in the observer's boat |
| **16:00 – 17:00** | ■ Debriefing<br>■ Introduction to the next day's activities |
| **17:00** | End of the activities |

## Agenda for 23 April

| | |
|---|---|
| **09:00 – 09:30** | Meeting at the lobby of the Hotel Abando (Bilbao) and proceed to Plaza Pio Baroja |
| **09:30 – 13:00** | ■ Boarding observer´s boat. Sailing to exercise area.<br>■ Briefing<br>■ At sea deployment of 2 booms in open-U formation and Monte Arucas with sweeping arms<br>■ Debriefing |
| **13:00 – 14:00** | Return to embarking point at Bilbao city centre in the observer's boat. Evaluation of the activities. |
| **14:00 – 14:30** | Final debriefing on-board the observer's boat. End of activities. |

3

## EMSA Exercises

**Type:**

- Notification
- Operational (max. 10 days/year)

**Scope:**

- Integration of EMSA vessels in EU Member States Command and Control Structures
- Co-operation with participating Units
- Internal and external level of coordination

4

## Exercise Scenario

### Exercise assumptions

- No specific location
- Transfer the scenario to your own territorial waters around 6 nautical miles offshore
- Scenario starts already as a severe accident, which then develops to a major incident
- This calls for international assistance
- The scenario focuses on oil spill response operations at sea
- Shoreline response should not to be taken into account during this exercise



## Exercise Scenario

### Initial situation

**On 21 April 2015 at 04.00 LT** the container vessel MS Telia collides with the oil tanker MT Lostoil.

MT Lostoil *(30,000 t DWT; laden with 20,000 t HFO 30, 30 cSt. at 50°C, 100 cSt. at 20°C, Flashpoint 60°C).*

## Exercise Scenario

### Initial situation

The contents of the affected two oil cargo tanks (2.000 tonnes) spill into the sea

The tanker owners order two salvage tugs to assist the stricken vessel



## Exercise Scenario

### Initial situation

The operation centre in charge of the State is sending all available oil spill response vessels to the vicinity of the incident to respond to the oil pollution at sea.

After 12 hours the captain reports cracks in the hull on the port side adjacent to the damages starboard side

## Exercise Scenario

### Initial situation

**On 22 April 2015 at 08:00 LT** the hull of the tanker breaks and both parts sink. An additional amount of 2.000 tonnes spills into the sea

## Exercise Scenario

### Aerial reconnaissance

**22 April 2015, 09:00 LT** the aerial reconnaissance gives an affected area of 12 km².

The wreck is still leaking more oil

**<u>Weather conditions</u>**
**Temp.: Day 12 °C, night 8 °C**
**Water: 14 °C,**
**Wind: NE 2-3 Bft**
**Wave: 1 m**

## Exercise Scenario

### Drift modelling for the oil slick

X Location of the incident

The result of the drift calculation for the **23 April 2015 at 09.00 LT** gives an area of 20 km² which is covered with oil.



## Exercise Scenario

**Time line 21.04.15– 23.04.15**

Sunrise: 8:00 UTC
Sunset: 17:00 UTC

Collision

## Monte Arucas

EMSA

EUROPEAN MARITIME SAFETY AGENCY

QUALITY SHIPPING, SAFER SEAS, CLEANER OCEANS

ATLANTIC — NETWORK OF STAND-BY OIL SPILL RESPONSE VESSELS - INFO SHEET

CONTRACTOR
Sertosa Norte (Ibeizabal Group)
CONTRACTED VESSEL(S)
Monte Arucas
AREA OF ECONOMIC OPERATION
Vidnity of Ferrol (north-western Spain)
STOCKPILE LOCATION
Ferrol, Spain
NUMBER OF VESSELS TO BE MOBILISED
1
MOBILISATION TIME
Within 12 hours

Ferrol
PT
ES

ABOUT THE SERVICE
The Contractor, Sertosa Norte, is part of Ibeizabal Group and has long experience in operations in ports, at sea, salvage works, towage, fire- fighting and antipollution services.

The arrangement includes the barge Monte Arucas, which is based in Ferrol, providing bunkering services. The equipment is permanently installed onboard.

EQUIPMENT STOCKPILE
Sweeping arms
Two Koseq rigid sweeping arms (15 m) with weir skimmer
Boom
Lamor offshore boom, 2x250 m (LSP 1900)
Skimmer
Lamor high-capacity multiskimmer (LWS 1300)
Slick detection
Miros oil slick detection system
Additional equipment
Gas detector, Mini Lab, Flashpoint tester, Cleaning machines

Sweeping arms — Lamor multiskimmer — Boom — Slick detection

ABOUT THE VESSEL - Monte Arucas

The Monte Arucas' commercial activity is bunkering services.

IMO number: 9494981
Flag state: Spain
Port of registry: Santa Cruz de Tenerife
Type: Oil Tanker
Built: 2009
Length: 79.95 m
Breadth: 15.00 m
Max draft: 5.30 m
Gross Tonnage: 1676 Ton
Storage capacity: 2940 m³
Heating capacity: 1800 kW
Pumping capacity: 950 m³/h
Flash Point: >60°
Propeller: 2 x Azymuthal Propeller
Bow Thruster: Yes
Max. speed: 10 knots
Classification Society: Bureau Veritas

FOR MORE INFORMATION: www.emsa.europa.eu

## Mechanical Recovery Formation Boom & Skimmer

EMSA

Consists of a support vessel towing a boom in a “J” configuration, concentrating the spilled oil for recovery into the back of the pocket formed by the boom. The EMSA vessel towing at the rear is outfitted with an skimmer for deployment along the vessel side where the apex of the boom is formed.

## Mechanical Recovery Formation Boom & Skimmer - Day 1

## Day 1 - Equipment configuration Secondary System: Boom & skimmer

**J-formation deployment**

## Day 1 - Equipment configuration Secondary System: Boom & skimmer

17

## Mechanical Recovery Formation – Boom & Sweeping Arms in open-U configuration

Consists of two support vessel towing two booms in a “U” configuration, concentrating and “funneling” the spilled oil for recovery through the gap between the booms. The EMSA vessel outfitted with both sweeping arms recovers the oil behind the booms

18

## Mechanical Recovery Formation – Boom & Sweeping Arms in open-U configuration

## Day 2 - Equipment configuration Primary System: Sweeping Arms

20

**emsa.europa.eu**

twitter.com/emsa_lisbon
facebook.com/emsa.lisbon

EMSA
European Maritime Safety Agency